

## JCOTS Nanotechnology Advisory Committee

### Discussion of Possible Recommendations to JCOTS

#### Education Initiatives

- Recommend the creation of a program to create incentives for industry to partner with state universities to sponsor research, create faculty chairs, and award nanotechnology scholarships.
- Recommend that the Commonwealth require universities, community colleges, primary and secondary schools to provide nanotechnology education/exposure in educational curricula.
- Create technical degrees in nanotechnology/nanomanufacturing.

#### Funding Initiatives

- Create a program of tax incentives to attract industry.  
Note: Existing provisions in the Code of Virginia allow localities to create separate tax classifications lower than the general tax rate for machinery and tools used in semiconductor manufacturing and for tangible property used for research, development and production of commercial biotechnology products and processes. Similar provisions could be crafted relating to nanotechnology.
- Provide "seed money" to support the development of nano manufacturing.  
Note: Programs could be modeled after the existing Commonwealth Technology Research Fund or the Biotechnology Commercialization Loan Fund.
- Ensure that infrastructure/tools exist to make the Commonwealth competitive: nanotechnology-directed programs that encourage interaction between Virginia universities and collaborations between industry/universities/state & federal labs. Funds would be dispersed through a competitive proposal process -- possibly utilizing framework suggested by CIT.
- State-funded program to continue work in carbonaceous nanomaterials, administered by CIT.
- Provide matching funds for Small Business Innovation Research (SBIR), a federal funding program administered by the Small Business Administration.  
Note: Michigan has established such a program.

#### Creation of a Centralized Resource

- Appoint CIT to direct and execute a nanotechnology plan -- this suggestion would build on the already established Virginia Nanotechnology Initiative, and staffing would include a director and a board of directors operating under a legislative charter.
- Integrate CIT into the Virginia Economic Development Partnership to help make Virginia a national competitor in nanotechnology.

- Establish a centralized body in the Commonwealth that would be responsible for coordinating nanotechnology activities (possibly utilize existing group, like CIT).
- Recommend the establishment of a state nanotechnology commission, similar to the Virginia Biotechnology Initiative (created by executive order).

#### Other Recommendations

- Encourage the Commonwealth to partner with other states to develop regional cooperation (ex: Virginia, Maryland and Delaware).
- Conduct "Nano-fairs" to highlight the work of Virginia Universities.
- Adopt a policy of developing/promoting nanotechnology based medical sciences research, development, engineering and manufacturing base in the Commonwealth.
- Conduct an analysis of all economic resources in the Commonwealth that could play a role in the development of a Virginia Nanotechnology-Based Medical Sciences Economy.
- Initiate a national advertising campaign to identify the resources that the Commonwealth has to offer to foster a nanotechnology-based industry.
- Establish a commission to review current technology transfer laws and regulations to support the efficiency of moving research and development with commercial potential to the marketplace.